

Docket No. AUS920031071US1

**CLAIMS:**

What is claimed is:

1. A method in a data processing system for generating a notification of an event, the method comprising:
  - responsive to detecting a presence of the event in a platform in the data processing system, generating a hardware interrupt to an operating system;
  - responsive to the presence of the event, storing the event in a partition queue associated with a partition firmware;
  - responsive to receiving a request to check the hardware interrupt in the partition firmware, identifying the event in the partition queue; and
  - responsive to identifying the event, processing the event.
2. The method of claim 1, wherein the processing step includes:
  - initiating a corrective action; and
  - sending a notification to the operating system.
3. The method of claim 2, wherein the notification is an informational log.
4. The method of claim 1, wherein the processing step includes:
  - sending an error log to the operating system.

Docket No. AUS920031071US1

5. The method of claim 4 further comprising:  
responsive to receiving the error log at the operating system, performing by the operating system at least one of a corrective action and a preventative action.
6. The method of claim 1, wherein the event is one of a thermal event or a power event.
7. The method of claim 1, wherein the processing step results in at least one of backing of data in a memory to a disk, freezing input/output operations, suspending kernel services, and monitoring the platform for additional events.
8. The method of claim 1, wherein the event has an event type and wherein partition queue associated with the event type.
9. The method of claim 1, wherein the data processing system is a logical partitioned data processing system having a plurality of partitions in which each partition includes the operating system.
10. The method of claim 1, wherein the request is generated in response to the operating system identifying a source for the hardware interrupt.

Docket No. AUS920031071US1

11. A data processing system for generating a notification of an event, the data processing system comprising:

generating means, responsive to detecting a presence of the event in a platform in the data processing system, for generating a hardware interrupt to an operating system;

storing means, responsive to the presence of the event, for storing the event in a partition queue associated with a partition firmware;

identifying means, responsive to receiving a request to check the hardware interrupt in the partition firmware, for identifying the event in the partition queue; and

processing means, responsive to identifying the event, for processing the event.

12. The data processing system of claim 11, wherein the processing means includes:

initiating means for initiating a corrective action; and

sending means for sending a notification to the operating system.

13. The data processing system of claim 12, wherein the notification is an informational log.

14. The data processing system of claim 11, wherein the processing means includes:

Docket No. AUS920031071US1

sending means for sending an error log to the operating system.

15. The data processing system of claim 14 further comprising:

performing means, responsive to receiving the error log at the operating system, for performing by the operating system at least one of a corrective action and a preventative action.

16. The data processing system of claim 11, wherein the event is one of a thermal event or a power event.

17. The data processing system of claim 11, wherein the processing means results in at least one of backing of data in a memory to a disk, freezing input/output operations, suspending kernel services, and monitoring the platform for additional events.

18. The data processing system of claim 11, wherein the event has an event type and wherein partition queue associated with the event type.

19. The data processing system of claim 11, wherein the data processing system is a logical partitioned data processing system having a plurality of partitions in which each partition includes the operating system.

Docket No. AUS920031071US1

20. The data processing system of claim 11, wherein the request is generated in response to the operating system identifying a source for the hardware interrupt.

21. A computer program product in a computer readable medium for generating a notification of an event, the computer program product comprising:

first instructions, responsive to detecting a presence of the event in a platform in the data processing system, for generating a hardware interrupt to an operating system;

second instructions, responsive to the presence of the event, for storing the event in a partition queue associated with a partition firmware;

third instructions, responsive to receiving a request to check the hardware interrupt in the partition firmware, for identifying the event in the partition queue; and

fourth instructions, responsive to identifying the event, for processing the event.

22. The computer program product of claim 21, wherein the fourth instructions includes:

first sub-instructions for initiating a corrective action; and

second sub-instructions for sending a notification to the operating system.

23. The computer program product of claim 22, wherein the notification is an informational log.

Docket No. AUS920031071US1

24. The computer program product of claim 21, wherein the fourth instructions includes:

sub-instructions for sending an error log to the operating system.

25. The computer program product of claim 24 further comprising:

fifth instructions, responsive to receiving the error log at the operating system, for performing by the operating system at least one of a corrective action and a preventative action.

26. A data processing system comprising:

a bus system;

a memory connected to the bus system, wherein the memory includes a set of instructions; and

a processing unit connected to the bus system, wherein the processing unit executes a set of instructions to generate a hardware interrupt to an operating system, in response to detecting a presence of an event in a platform in the data processing system; store the event in a partition queue associated with a partition firmware, in response to the presence of the event; identify the event in the partition queue, in response to receiving a request to check the hardware interrupt in the partition firmware; and process the event, in response to identifying the event.